This listing of claims will replace all prior versions, and listings, of claims in the application;

LISTING OF CLAIMS:

1. (Currently Amended) A compound of the formula

in which

R¹ is C₁-C₈-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl or C₃-C₈-cycloalkyl, where C₁-C₈-alkyl is optionally substituted by oxo, and

where C_1 – C_6 -alkyl, C_2 – C_6 -alkenyl, C_2 – C_6 -alkynyl and C_3 – C_8 -cycloalkyl are optionally substituted by up to 3 radicals independently of one another selected from the group of C_1 – C_6 -alkyl, C_1 – C_6 -alkoxy, hydroxycarbonyl, cyano, amino, nitro, hydroxy, C_1 – C_6 -alkylamino, halogen, trifluoromethyl, trifluoromethoxy, C_6 – C_{10} -arylcarbonylamino, C_1 – C_6 -alkylcarbonylamino, C_1 – C_6 -alkylcarbonyl, heteroarylcarbonyl, C_6 – C_{10} -arylaminocarbonyl, heteroarylcarbonylamino, C_1 – C_6 -alkylcarbonylamino, C_1 - C_6 - $C_$

where

$$\begin{split} &C_1\text{--}C_6\text{--alkyl, }C_1\text{--}C_6\text{--alkoxy, }C_1\text{--}C_6\text{--alkylamino, }C_6\text{--}C_{10}\text{--arylcarbonylamino, }C_1\text{--}C_6\text{--alkylaminocarbonyl, }C_1\text{--}C_6\text{--alkoxycarbonyl, }\\ &C_6\text{--}C_{10}\text{--arylaminocarbonyl, heteroarylaminocarbonyl, }\\ &\text{heteroarylcarbonylamino, }C_1\text{--}C_6\text{--alkyl-uphonylamino, }C_1\text{--}C_6\text{--alkyl-uphonylamino,$$

sulphonyl and C_1 - C_6 -alkylthio are optionally substituted by one to three radicals independently of one another selected from the group of hydroxy, cyano, halogen, trifluoromethyl, trifluoromethoxy, hydroxycarbonyl and a group of the formula $-NR^3R^4$,

where

R³ and R⁴ are independently of one another hydrogen or C₁-C₆-alkyl,

or

R³ and R⁴ together with the nitrogen atom to which they are bonded are 5- to 8-membered heterocyclyl,

R² is phenyl or heteroaryl, where phenyl is substituted by 1 to 3 radicals and heteroaryl is optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C₁-C₆-alkyl, C₁-C₆-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, trifluoromethoxy, amino, nitro, hydroxy, C₁-C₆-alkylamino, halogen, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxycarbonyl, C₆-C₁₀-arylaminocarbonyl, heteroarylaminocarbonyl, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl and C₁-C₆-alkyltino,

where C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylamino, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxy-carbonyl, C₆-C₁₀-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylaminocarbonyl, heteroarylamino, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl and C₁-C₆-alkylthio are optionally substituted by one to three radicals independently of one another selected from the group of hydroxy, cyano, halogen, trifluoromethyl, trifluoromethoxy, hydroxycarbonyl and a group of the formula –NR³R⁴.

where

R³ and R⁴ have the meanings indicated above,

or a salt solvate or solvate of a salt thereof

(Currently Amended) The compound of claim 1, where

R¹ is C₁-C₈-alkyl, C₂-C₆-alkenyl, C₂-C₆-alkynyl or C₃-C₈-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C₁-C₆-alkyl, C₁-C₆-alkoxy, hydroxycarbonyl, cyano, amino, nitro, hydroxy, C₁-C₆-alkylamino, halogen, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxycarbonyl, C₆-C₁₀-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl and C₁-C₆-alkylthio,

where C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, C_1 - C_6 -alkylamino, C_6 - C_{10} -arylcarbonylamino, C_1 - C_6 -alkylaminocarbonyl, C_1 - C_6 -alkoxycarbonyl, C_1 - C_6 -alkylaminocarbonyl, heteroarylaminocarbonyl, heteroarylamino, C_1 - C_6 -alkylsulphonylamino, C_1 - C_6 -alkylsulphonylamino, C_1 - C_6 -alkylsulphonyl and C_1 - C_6 -alkylsulphonylamino, C_1 - C_6 -alkylsulphonylam

where

R³ and R⁴ are independently of one another hydrogen or C₁-C₆-alkyl,

or

R³ and R⁴ together with the nitrogen atom to which they are bonded are 5- to 8-membered heterocyclyl,

R² is phenyl or heteroaryl, where phenyl is substituted by 1 to 3 radicals and

heteroaryl is optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, amino, nitro, hydroxy, C_1 - C_6 -alkylamino, halogen, C_6 - C_{10} -arylcarbonylamino, C_1 - C_6 -alkylaminocarbonyl, C_1 - C_6 -alkoycarbonyl, C_6 - C_{10} -arylaminocarbonyl, heteroarylaminocarbonyl, C_1 - C_6 -alkylamino, C_1 - C_6 -alkylsulphonylamino, C_1 - C_6 -alkylsulphonyl, C_1 - C_6 -alkylthio,

where C₁-C₆-alkyl, C₁-C₆-alkoxy, C₁-C₆-alkylamino, C₆-C₁₀-arylcarbonylamino, C₁-C₆-alkylcarbonylamino, C₁-C₆-alkylaminocarbonyl, C₁-C₆-alkoxy-carbonyl, C₆-C₁₀-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₆-alkylsulphonylamino, C₁-C₆-alkylsulphonyl and C₁-C₆-alkylthio are optionally substituted by a radical selected from the group of hydroxy, cyano, halogen, hydroxycarbonyl and a group of formula -NR³R⁴.

where

R3 and R4 have the meanings indicated above,

or a salt, solvate or solvate of a salt thereof.

(Currently Amended) A compound of claim 1, where

R¹ is C₁-C₅-alkyl or C₃-C₆-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C₁-C₄-alkyl, C₁-C₄-alkoxy, hydroxycarbonyl, cyano, amino, hydroxy, C₁-C₄-alkylamino, trifluoromethyl, fluorine, chlorine, bromine, C₆-C₁₀-arylcarbonylamino, C₁-C₄-alkylaminocarbonyl, C₁-C₄-alkoxycarbonyl, C₆-C₁₀-aryl-aminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₄-alkylsulphonyl, C₁-C₄-alkylsulphonyl, C₁-C₄-alkylthio,

where C_1 - C_4 -alkyl and C_1 - C_4 -alkoxy are optionally substituted by a radical selected from the group of hydroxy, cyano, fluorine, chlorine, bromine, hydroxycarbonyl and a group of the formula $-NR^3R^4$,

where

R³ and R⁴ are independently hydrogen or C₁-C₄-alkyl.

or

R³ and R⁴ together with the nitrogen atom to which they are bonded are 5- to 6-membered heterocyclyl.

R² is phenyl, pyrimidyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyrimidyl, pyridyl N-oxide and pyridyl are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of C₁-C₄-alkyl, C₁-C₄-alkoxy, hydroxycarbonyl, cyano, trifluoromethyl, amino, hydroxy, C₁-C₄-alkylamino, fluorine, chlorine, bromine, C₆-C₁₀-arylcarbonylamino, C₁-C₄-alkylcarbonylamino, C₁-C₄-alkylaminocarbonyl, C₁-C₄-alkoxycarbonyl, C₆-C₁₀-arylaminocarbonyl, heteroarylaminocarbonyl, heteroarylcarbonylamino, C₁-C₄-alkylsulphonylamino, C₁-C₄-alkylsulphonyl, and C₁-C₄-alkylthio.

where C_1 - C_4 -alkyl and C_1 - C_4 -alkoxy are optionally substituted by a radical selected from the group of hydroxy, cyano, fluorine, chlorine, bromine, hydroxycarbonyl and a group of the formula $-NR^3R^4$,

where

R3 and R4 have the meanings indicated in claim 1,

or a salt, solvate or solvate of a salt thereof.

(Currently Amended) A compound of claim 1, where

R1 has the meanings indicated in claim 1, and

R² is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyridyl and pyridyl N-oxide are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or a salt, solvate or solvate of a salt thereof.

5. (Currently Amended) A compound of claim 1, where

- R¹ is C₁-C₅-alkyl or C₅-C₆-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C₁-C₄-alkyl, trifluoromethyl, fluorine, hydroxy, phenylcarbonylamino, C₁-C₄-alkylcarbonylamino, C₁-C₄-alkylaminocarbonyl or phenylaminocarbonyl, and
- R² is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by 1 to 3 radicals and pyridyl and pyridyl N-oxide are optionally substituted by 1 to 3 radicals in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or a salt, solvate or solvate of a salt thereof.

6. (Currently Amended) A compound of claim 1, where

R¹ is C₁-C₅-alkyl or C₅-C₆-cycloalkyl, which are optionally substituted by up to 3 radicals independently of one another selected from the group of C₁-C₄-alkyl, fluorine, trifluoromethyl, hydroxy, phenylcarbonylamino, C_1 - C_4 -alkylcarbonylamino, C_1 - C_4 -alkylaminocarbonyl, and

R² is phenyl, pyridyl N-oxide or pyridyl, where phenyl is substituted by one radical and pyridyl and pyridyl N-oxide are optionally substituted by one radical in each case independently of one another selected from the group of methyl, ethyl, 2-propyl, trifluoromethyl, methoxy, ethoxy, fluorine and chlorine,

or a salt, solvate or solvate of a salt thereof,

- (Withdrawn Currently Amended) A process for preparing a compound according to claim 1, comprising:
 - [A] converting a compound of the formula

$$H_2N$$
 H_2N
 H_2N

in which

R² has the meanings indicated in claim 1,

by reaction with a compound of the formula

$$Z \longrightarrow Z$$
 (IIIa)

in which R1 has the meanings indicated in claim 1,

and

Z is chlorine or bromine,

in an inert solvent and in the presence of a base, initially into a compound of the formula

in which

R1 and R2 have the meanings indicated in claim 1,

and then cyclizing in an inert solvent in the presence of a base to a compound of the formula (I),

or

[B] reacting a compound of the formula (II) with a compound of the formula

$$\mathbb{R}^{1}$$
 \mathbb{R}^{5} (IIIb),

in which

R¹ has the meanings indicated in claim 1,

and

R⁵ is methyl or ethyl,

in an inert solvent and in the presence of a base, with direct cyclization to a compound of formula (I).

or

[C] converting a compound of the formula

in which

R² has the meanings indicated in claim 1,

initially by reaction with a compound of the formula (IIIa) in an inert solvent and in the presence of a base into a compound of the formula

in which

R1 and R2 have the meanings indicated in claim 1,

and cyclizing the compound for formula (VI) in a second step in an inert solvent and in the presence of a base and of an oxidizing agent to a compound of (I),

and the resulting compounds of the formula (I) are where appropriate reacted with the appropriate (i) solvents and/or (ii) bases or acids to give a salt, solvate-or-solvate-of-a salt thereof

- 8. (Cancelled)
- (Previously presented) A pharmaceutical composition comprising at least one compound of any one of claims 1 to 6 and at least one pharmaceutically acceptable, essentially non-toxic carrier or excipient.
- 10. (Cancelled)
- 11. (Cancelled)
- 12. (Cancelled)
- 13. (Withdrawn) A method for the treatment of impairments of perception, concentration, learning and/or memory in a human or animal comprising administering an effective amount of a compound of any one of claims 1 to 6 to the human or animal.
- 14. (Withdrawn) The method according to Claim 13, where the impairment is a consequence of Alzheimer's disease.
- 15. (New) A method for producing a medicament useful for treating an impairment of perception, concentration, learning and/or memory in a human or animal, comprising providing a compound according to claim 1 or a salt thereof in a form useful for treating perception, concentration, learning and/or memory in a human or animal.
- (New) The method according to Claim 15, where the impairment is a consequence of Alzheimer's disease.
- 17. (New) A pharmaceutical composition comprising a compound according to claim 1 or a salt thereof, as the active moiety.